

Nevada Division of Environmental Protection (NDEP)

FACT SHEET (pursuant to NAC 445A.236)

Permit Name: General Permit for Stormwater Discharges Associated with Industrial Activity from Metals Mining Activity to Waters of the U.S.

Permit Number: NVR300000

Description of Discharge:

Stormwater runoff from wasterock piles, haul roads, milling facilities and other mine areas that have not mixed with process solutions or other contaminant sources. Typical pollutants include suspended and dissolved solids and minerals eroded from exposed surfaces.

Location: Currently, there are 63 separately permitted mines located statewide.

Flow: In response to rainfall and snowmelt.

Receiving Water Characteristics: Variable depending on mine location.

Background:

Since the passage of the Clean Water Act (CWA), the quality of our Nation's waters has improved dramatically. Despite this progress, however, degraded water bodies still exist. According to the 1996 National Water Quality Inventory (Inventory), a biennial summary of State surveys of water quality, approximately 40 percent of surveyed U.S. water bodies are still impaired by pollution and do not meet water quality standards. A leading source of this impairment is polluted runoff. Phase I of the U.S. Environmental Protection Agency's (EPA) stormwater program was promulgated in 1990 under the CWA. Phase I relies on National Pollutant Discharge Elimination System (NPDES) permit coverage to address stormwater runoff from:

- (1) "Medium" and "large" municipal separate storm sewer systems (MS4s) generally serving populations of 100,000 or greater, and
- (2) Eleven categories of industrial activity as defined by 40 CFR 122.26.

Activities that take place at industrial facilities, such as material handling and storage, are often exposed to stormwater. The runoff from these activities discharges industrial pollutants into nearby storm sewer systems and water bodies. This may adversely impact water quality.

To limit pollutants in stormwater discharges from industrial facilities, the NPDES Phase I Stormwater Program includes an industrial stormwater permitting component. Operators of industrial facilities included in one of the 11 categories of "stormwater discharges associated with industrial activity" (40 CFR 122.26 (b)(14)(i)-(xi)) that discharge stormwater to a municipal separate storm sewer system (MS4) or directly to waters of the United States require authorization under a NPDES industrial stormwater permit. If an industrial facility has an applicable Standard Industrial Classification (SIC) code or meets the narrative description listed

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in the 11 categories, the facility operator must determine if the facility is eligible for coverage under a general or an individual NPDES industrial stormwater permit.

These industrial facilities are defined as "stormwater discharges associated with industrial activity" under federal regulations 40 CFR 122.26 (b)(14)(i) - (xi). Each category contains a list of SIC codes and/or a narrative description of industrial facilities. Operators of industrial facilities or sites with activities included in one of these 11 categories must obtain coverage under an NPDES industrial stormwater permit, unless conditionally excluded.

This permit is in response to requirements of the Federal Clean Water Act and implementing federal regulations, and is based on Best Management Practices (BMPs) such as education, diversion, detention, storage, spill response, and good housekeeping. BMPs selected by the facility are subject to Division approval. This is a continuation of a program begun in 1993 under the previous General Permits, GNV0022225 and NVR300000 respectively. Like the previous permit, this permit authorizes stormwater discharges associated with Standard Industrial Classification Code 10 metal mining (metallic mineral/ores) Category iii as defined under 40 CFR §122.26(b) (14) Category III Mineral Industry and all construction-related activities as defined by 40 CFR § 122.26(b) (14) (x) and (b) (15) at mine sites to Waters of the U.S. Water quality monitoring is required in limited circumstances for stormwater discharges from wasterock and overburden piles to Waters of the U.S. where those discharges will cause or contribute to exceedances of applicable state water quality standards.

Mining is the largest industry in rural Nevada. Nevada production accounts for 87% of the total US gold production and is the third largest producer in the world behind South Africa and Australia. Nevada also leads the nation in barite and gypsum production and produces significant copper, sand, gravel, limestone, diatomaceous earth, and specialty clays. Currently permitted, are 63 separate mines located statewide defined under Category III SIC code 10. Facilities that do not discharge to waters of the U.S. are not required to obtain coverage under this permit. Non-metallic mineral mining, classified under Category III SIC codes 11 through 14, are required to obtain coverage under a separate Stormwater General Permit NVR050000 released in April of 2003.

During the course of review for this permit, NDEP has performed a review of its Stormwater program. The review included elements of its General Permit for Stormwater Discharges Associated with Industrial Activity (Permit Number: NVR050000), General Permit for Stormwater Discharges Associated with Construction Activity (Permit Number: NVR100000), mining annual reports, monitoring plans, and other submittals. As a result of the review, it was determined that most of the language from the previous permit was still appropriate, however there were areas that could be improved to maintain consistency with the Statewide program. As such, this permit includes additional requirements for Storm Water Pollution Prevention Plans (SWPPP's), monitoring plans, annual reports, required responses from NDEP in review of submittals, and additional language that accounts for earth disturbing activities related to clearing, grading, and excavation associated with certain types of road building, as well as, construction of office buildings and other facilities on the mine site.

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Incorporation of these additional requirements is consistent with Nevada requirements for its other General Permits for Stormwater Discharges. Impacts to mine sites will include increased inspections, improved SWPPP's and site BMP's. The purpose of the SWPPP is to guide the identification of stormwater pollution sources, the reduction of their impacts, and otherwise lead to compliance with the conditions of this permit. Each of the SWPPP elements must be revised as necessary to maintain accuracy if there are changes in design or construction of the project or if the SWPPP is found to be insufficient. The copy of the SWPPP that is required to be kept on the mining site or locally available must be made available to NDEP for review at the time of an on-site inspection.

In addition to the SWPPP, all construction site stormwater discharges within the Mining site that are subject to NPDES permit requirements shall be controlled in accordance with the SWPPP. Construction sites do not include those areas of disturbance related to exploration or mining activities, i.e., the permit's additional construction requirements do not apply to activities associated with determining the site's financial viability for mine development; the extraction of the ore from the earth and the construction of heap leach pads, waste rock facilities, tailings impoundments or roads (provided those roads are not constructed with overburden, raw material, intermediate products, finished product, byproduct or waste product). Construction sites are, for purposes of the construction site requirements of this permit, limited to areas of disturbance associated with building construction or road construction (where those roads are constructed with mine materials) if those activities are subject to NPDES permit requirements. The construction site SWPPP may be a separate document created specifically for the project or part of the overall Mining site SWPPP. In either case, the construction site SWPPP must address construction schedules; acreage to be disturbed by the construction activity; site plan drawing with discharge points and BMPs shown; BMPs for erosion and sediment control; BMP maintenance/repair; a description of the storm drain facilities that will be built as part of the project, and the post construction BMPs associated with the operation of those storm drains.

In the previous 2000 mining permit, there were concerns regarding discharges from waste rock and overburden piles and the potential of such discharges to cause or contribute to exceedance of state water quality standards. The permit required (within 6 months of its effective date) either a monitoring plan for such discharges or the submittal of information showing that the discharges would not be expected to cause or contribute to an exceedance of standards. From a record review it appears that the submittal of information showing that the discharges would not be expected to cause or contribute to exceedance of standards was widely used. The program warranted continuation and additional information for continued evaluation by NDEP. In this permit, permittees are required to update and continue to implement monitoring plans for sampling stormwater discharges from waste rock dumps and overburden piles to Waters of The U.S. The updated monitoring plan shall be included as a separate section within the SWPPP.

Alternatively, each permittee shall include updated information, as a separate section within the SWPPP, indicating that the expected discharges from waste rock dumps and overburden piles

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would not have reasonable potential to cause or contribute to exceedances of applicable water quality standards. Such information shall include descriptions of the BMP's and any other treatment practices that are presently in-place or are planned to be installed, including supporting information for any assumptions made concerning the effectiveness of the BMPs or treatment; a plan for BMP maintenance, including routine visual monitoring and site inspections; a plan for the identification and correction of leaks, spills, and other types of events that can impact storm water quality; and any additional information addressing source control or otherwise related to storm water management at mine sites, as well as, other relevant information subject to approval by the Division.

Upon a determination by the permittee or NDEP that the discharges are causing or contributing to an exceedance of applicable state water quality standards, the permittee shall develop and implement an action plan (with supplemental BMPs or treatment practices, and including an implementation schedule) to ensure that future discharges do not cause or contribute to exceedances. The action plan shall be submitted to NDEP within 60 days of the determination unless additional time is provided by NDEP. Upon review, NDEP shall notify the permittee within 6 months if the information is insufficient to ensure compliance with the requirements and objectives of this permit. In such a circumstance, NDEP may require modifications to the action plan which must be implemented within a time frame determined by NDEP.

Under the General requirements of this permit, there shall be no discharge of substances to Waters of the State that would cause a violation of water quality standards of the State of Nevada.

Permit Requirements: Facilities that are authorized under the existing National Pollutant Discharge Elimination System (NPDES) permit for discharges associated with Metals Mining activity must submit a new Notice of Intent (NOI) within 90 days following the effective date of this permit. New Eligible dischargers are required to request inclusion in this general permit by completing a NOI and filing fee with NDEP no later than 2 days prior to the start of discharge. Provisional authorization begins 24 hours after a completed NOI is received by the Division.

Permittee shall prepare and implement a SWPPP prior to commencement of activity. A Permittee shall implement BMP measures to ensure compliance with the terms and conditions of this general permit. The SWPPP shall be prepared in accordance with professional and/or good engineering practice and is subject to approval by NDEP.

SWPPP's shall be submitted to NDEP within 6 months of the effective date of this permit or approval of the submitted NOI. SWPPP's shall also be available for inspection at the project site or operation covered by this permit. The purpose of the SWPPP is to guide the identification of stormwater pollution sources, the reduction of their impacts, and otherwise lead to compliance with the conditions of this permit. Each of the SWPPP elements must be revised as necessary to maintain accuracy if there are changes in design or construction of the project or if the SWPPP is found to be insufficient.

The permittee shall make SWPPPs available upon request to the State or local agency approving

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sediment and erosion plans, grading plans, or storm water management plans; local government officials; or the operator of a municipal separate storm sewer receiving discharges from the site. The copy of the SWPPP that is required to be kept on the mining site or locally available must be made available to NDEP for review at the time of an on-site inspection.

Rationale for Permit Requirements:

The conditions set in permit language are the minimum requirements to maintain and implement an effective stormwater program within the confines of U. S. EPA published rules (Title 40 of the Code of Federal Regulations Part 122) for use in stormwater permits. BMP's are approved by the U.S. EPA for use in stormwater permits, and the existing program appears successful based on the past eleven years under the previous permits.

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